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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/050,941	01/22/2002	David Hall	15186-24US JA/AD/MB	3864
20988 75	590 10/14/2004		EXAMINER	
OGILVY RENAULT			SMITH, RUTH S	
1981 MCGILL COLLEGE AVENUE SUITE 1600		ART UNIT	PAPER NUMBER	
MONTREAL, QC H3A2Y3 CANADA			3737	
			DATE MAILED: 10/14/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

,	Application No.	Applicant(s)				
	10/050,941	HALL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ruth S Smith	3737				
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu.  Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 136(a). In no event, however, may a reply be tingle within the statutory minimum of thirty (30) day d will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20 August 2004.						
2a)⊠ This action is <b>FINAL</b> . 2b)□ Th	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-16 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and are subject.	awn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the corre	* * * * * * * * * * * * * * * * * * * *					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicati iority documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06 Paper No(s)/Mail Date		Patent Application (PTO-152)				

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7,10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chance in view of Levitt. Chance discloses a system and method of optical imaging using time and frequency domain measurements to evaluate medical conditions using light from a tunable laser, a plurality of wavelengths injected at one or more positions, switching to direct the light at a plurality of injection ports and detection at multiple positions. Chance fails to disclose the use of simultaneous detection at multiple wavelengths. Levitt discloses multiple simultaneous optical measurements. The measurements can be any type of time-domain parameter such as wavelength. The input signals may be light and the carrier signal may also be optical. It would have been obvious to one skilled in the art to have modified Chance such that the detection of the multiple wavelengths takes place simultaneously as disclosed by Levitt. The advantage of such is to reduce data acquisition time and provide more enhanced data as disclosed by Levitt.

Claims 8-9,14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chance in view of Levitt and Feng et al. Chance discloses a system and method

of optical imaging using time and frequency domain measurements to evaluate medical conditions using light from a tunable laser, a plurality of wavelengths injected at one or more positions, switching to direct the light at a plurality of injection ports and detection at multiple positions. Chance fails to disclose the use of simultaneous detection at multiple wavelengths. Levitt discloses multiple simultaneous optical measurements. The measurements can be any type of time-domain parameter such as wavelength. The input signals may be light and the carrier signal may also be optical. It would have been obvious to one skilled in the art to have modified Chance such that the detection of the multiple wavelengths takes place simultaneously as disclosed by Levitt. The advantage of such is to reduce data acquisition time and provide more enhanced data as disclosed by Levitt. Chance discloses optical detection using semiconductors devices but fails to disclose detection with a CCD camera and filtering. Feng et al disclose a system and method of optical imaging using time and frequency domain measurements of diffusion of photons using multiple wavelengths provided by a plurality of laser sources, switching between multiple injection ports, and detection with CCD camera and bandpass filter. It would have been obvious to one skilled in the art to have further modified Chance such that it employs the well known detection means as taught by Feng et al with the imaging device taught by Chance. Such a modification merely involves the substitution of one well known type of detection device for another.

## Response to Arguments

Applicant's arguments filed 8/20/04 have been fully considered but they are not persuasive. Applicant's arguments are not understood in that Levitt was cited merely as a teaching that it is known to detect the multiple wavelengths simultaneously. As previously stated such a modification would reduce data acquisition time.

## Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S Smith whose telephone number is (703) 308-3063. The examiner can normally be reached on M-F 5:30 AM- 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (703) 308-3552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth S Smith Primary Examiner

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